

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A network configuration method of configuring a wireless network, comprising:

an access point device receiving a network configuration request for configuring a new wireless network comprising the access point device and at least one client terminal;

a first link establishing step of establishing, between ~~an~~ the access point device and a client terminal, a first wireless communication link through a first encrypted communication that does not require ~~an~~ requiring no authentication process;

a determination step of determining whether or not the client terminal is authorized to be configured in the network with the access point device;

a sending step of, if the determination step determines that the client terminal is authorized to be configured in the network with the access point device, the access point device sending authentication data from said access point device to said client terminal in a state where the first wireless communication link through said first encrypted communication is established;

a link discarding step of discarding the first wireless communication link through said first encrypted communication between said access point device and said client terminal in response to the sending of the authentication data to the client terminal by the access point device at said sending step; and

a second link establishing step of establishing, between said access point device and said client terminal, a second wireless communication link through a second encrypted communication that requires an authentication process using the authentication data sent to said client terminal continually after discarding the first communication link at said link discarding step.

2. (Currently Amended) A network configuration method for a communication apparatus of configuring a wireless network, comprising:

the communication apparatus receiving a network configuration request for configuring a new wireless network comprising the communication apparatus and at least one client terminal;

a first link establishing step of establishing, between the communication apparatus and another communication apparatus the client terminal, a first wireless communication link through a first encrypted communication that does not require an requiring no authentication process;

a determination step of determining whether or not the client terminal is authorized to be configured in the network with the communication apparatus;

a sending step of, if the determination step determines that the client apparatus is authorized to be configured in the network with the communication apparatus, the communication apparatus sending authentication data to said another communication apparatus client terminal in a state where the first wireless communication link at said first link establishing step is established;

a link discarding step of discarding the first wireless communication link

established at said first link establishing step between said communication apparatus and said another communication apparatus client terminal in response to the sending of said authentication data to the client terminal by the communication apparatus at said sending step; and

a second link establishing step of establishing, between the communication apparatus and the client terminal, a second wireless communication link through a second encrypted communication, that requires an authentication process using the authentication data sent to said another communication apparatus client terminal, between said communication apparatus and said another communication apparatus, continually after discarding the first communication link at said link discarding step.

3. (Currently Amended) The network configuration method according to claim 2, further comprising a selection step of selecting a communication apparatus client terminal permitting said second encrypted communication from among other communication apparatuses a plurality of client terminals with which a link is established at said first link establishing step, wherein said sending step sends the authentication data to said communication apparatus client terminal selected at said selection step.

4. (Previously Presented) The network configuration method according to claim 3, wherein said selection step comprises making said selection on the basis of a user operation.

5. (Currently Amended) The network configuration method according to

claim 2, further comprising a selection step of selecting a ~~communication apparatus~~ client terminal permitting said second encrypted communication from among ~~other~~ communication apparatuses a plurality of client terminals with which a link is established at said first link establishing step, and a filter setting step of setting address filtering based on the selection at said selection step.

6. (Currently Amended) The network configuration method according to claim 2, wherein said second link establishing step comprises establishing the second wireless communication link through said second encrypted communication in accordance with an authentication result from said authentication process.

7. (Original) The network configuration method according to claim 2, wherein the authentication in said authentication process is performed by said communication apparatus.

8. (Original) The network configuration method according to claim 2, further comprising a creation step of creating the authentication data sent at said sending step.

9. (Original) The network configuration method according to claim 2, wherein said communication apparatus is an access point.

10. (Currently Amended) The network configuration method according to claim 2, wherein the authentication data sent at said sending step is effective for a fixed period of time.

11. (Currently Amended) A network configuration method for of a client terminal communication apparatus for configuring a wireless network, comprising: sending a network configuration request by the client terminal to a communication apparatus requesting to configure a new wireless network comprising the client terminal and the communication apparatus;

a first link establishing step of establishing, between the communication apparatus client terminal and another the communication apparatus, a first wireless communication link through a first encrypted communication that does not require an requiring no authentication process;

a receiving step of receiving authentication data from said another communication apparatus in a state where the first wireless communication link at said first link establishing step is established, wherein the received authentication data is sent to the client terminal by the communication apparatus if the communication apparatus determines, based on the network configuration request sent by the client terminal, that the client terminal is authorized to be configured in the network with the communication apparatus;

a link discarding step of discarding the first wireless communication link established at said first link establishing step between said communication apparatus client terminal and said another communication apparatus in response to the receiving of said

authentication data at said receiving step; and

a second link establishing step of establishing, between the communication apparatus client terminal and the another communication apparatus, a second wireless communication link through a second encrypted communication that requires an authentication process using the authentication data received from said another communication apparatus, continually after discarding the first communication link at said link discarding step.

12. (Currently Amended) The network configuration method ~~for a~~ communication apparatus according to claim 11, wherein the authentication in said authentication process is performed by said another communication apparatus.

13. (Currently Amended) A wireless communication system comprising: network configuration request receiving means for receiving, from a client terminal to an access point device, a request for configuring a new wireless network comprising the client terminal and the access point device;

first link establishing means for establishing, between an the access point device and [[a]] the client terminal, a first wireless communication link through a first encrypted communication that does not require an requiring no authentication process;

determination means for determining whether or not the client terminal is authorized to be configured in the network with the access point device;

sending means for, if the determination means determines that the client terminal is authorized to be configured in the network with the access point device, sending

authentication data from said access point device to said client terminal in a state where the first wireless communication link through said first encrypted communication is established;

link discarding means for discarding the first wireless communication link through said first encrypted communication between said access point device and said client terminal in response to the sending of the authentication data to the client terminal by said sending means; and

second link establishing means for establishing, between the access point device and the client terminal, a second wireless communication link through a second encrypted communication that requires an authentication process using the authentication data sent to said client terminal, continually after discarding the first communication link by said link discarding means.

14. (Currently Amended) An access point for a wireless communication network, apparatus comprising:

network configuration request receiving means for receiving, from a client terminal, a request for configuring a new wireless communication network comprising the client terminal and the access point device;

first link establishing means for establishing, between the communication apparatus access point device and another communication apparatus the client terminal, a first wireless communication link through a first encrypted communication that does not require an requiring no authentication process;

determination means for determining whether or not the client terminal is authorized to be configured in the network with the access point device;

sending means for, if the determination means determines that the client terminal is authorized to be configured in the network with the access point device,

sending authentication data to said another communication apparatus client terminal in a state where the first wireless communication link is established by said first link establishing means;

link discarding means for discarding the first wireless communication link established by said first link establishing means between said communication apparatus and said another communication apparatus client terminal and said access point device, in response to the sending of the authentication data to the client terminal by said sending means; and

second link establishing means for establishing, between said communication apparatus and said another communication apparatus client terminal and said access point device, a second wireless communication link through a second encrypted communication that requires an authentication process using the authentication data sent to said another communication apparatus client terminal, continually after discarding the first communication link by said link discarding means.

15. (Currently Amended) A communication apparatus client terminal for a wireless communication network, comprising:

network configuration request sending means for sending to an access point device, a request to configure a new wireless communication network comprising the client terminal and the access point device;

first link establishing means for establishing, between said communication apparatus and another communication apparatus client terminal and said access point device, a first wireless communication link through a first encrypted communication requiring no that does not require an authentication process;

receiving means for receiving authentication data from said another communication apparatus access point device in a state where the first wireless communication link is established by said first link establishing means, wherein the received authentication data is sent to the client terminal by the access point device if the access point device determines, based on the network configuration request sent by the client terminal, that the client terminal is authorized to be configured in the network with the access point device;

link discarding means for discarding the first wireless communication link established by said first link establishing means between said communication apparatus and said another communication apparatus client terminal and said access point device in response to the receiving of the authentication data from the access point device by said receiving means; and

second link establishing means for establishing, between said communication apparatus and said another communication apparatus client terminal and said access point device, a second wireless communication link through a second encrypted communication that requires an authentication process using the authentication data

received from said ~~another communication apparatus~~ access point device, continually after discarding the first communication link by said link discarding means.